

Application No. 09/908,963
Amendment dated September 30, 2003
Reply to Office Action of September 10, 2003

REMARKS

Rejection of claim 1 is maintained under 35 U.S.C. § 102(e) over Komatsu (U.S. Patent Publication 2001/0046873) by the Examiner. Claim 1 calls for a method including determining for a channel, channel prediction terms from both first channel estimation terms derived from first common pilot channel signal and second channel estimation terms derived from second common pilot channel signal. The channel prediction terms enable control over future transmission patterns of the channel.

In the latest Office Action, which is made final, the Examiner contends that estimating the downward channel on the basis of the received downward signal is determining channel prediction terms and estimating the upward channel on the basis of the received downward signal from different channel estimation terms is deriving different channel estimation terms corresponding to common pilot channel signals. In this manner, the Examiner therefore concludes that the upward link and downward link signals are the same as common pilot channel signals. However, the Applicant respectfully requests consideration of the specific claim limitations of independent claim 1. Accordingly, Komatsu without the use of known pilot signals from a pilot channel to derive channel estimation terms that determine channel prediction terms, enabling control thereof in future transmission patterns, fails to anticipate the limitations of claim 1.

In particular, independent claim 1 recites determining for a channel, channel prediction terms from both first channel estimation terms derived from first common pilot channel signal and second channel estimation terms derived from second common pilot channel signal. Komatsu neither teaches nor suggests use of common pilot channel signals, let alone in the manner claimed in claim 1. In fact, there is no teaching or a specific hint as to use of common pilot channel signals in a manner claimed in claim 1. Missing use of known pilot signals, let alone merely pilot signals, Komatsu cannot anticipate claim 1, rendering claim 1 in condition for allowance, which is respectfully requested of the Examiner. Because the Examiner fails to show where Komatsu purportedly teaches or suggests that the upward and downward link signals are the same as

Application No. 09/908,963
Amendment dated September 30, 2003
Reply to Office Action of September 10, 2003

common pilot channel signals in the cited Komatsu reference, dependent claims from independent claim 1 are patentable for at least the reason that these claims depend from an allowable independent claim.

Komatsu merely uses upward and downward link signals to perform channel estimation at a mobile terminal. The mobile terminal in the Komatsu reference receives signals from the base station which receives the control command from the mobile terminal and executes, on the basis of the control command, the antenna switching transmission diversity. There is no teaching whatsoever that the base station transmits a pilot channel having one or more pilot signals to the mobile terminal, let alone known common pilot channel signals in a way that enables accurate estimation of the channel parameters. Therefore, in absence of a precise channel state knowledge, the Komatsu reference fails to adequately compensate for certain transmission and signal capture-related distortions. Thus, independent claim 1 and the dependent claims therefrom are in condition for allowance.

The rejection of independent claim 15 under 35 U.S.C. § 103(a) over Komatsu (WO 00/72464) is maintained by the Examiner. The apparatus of claim 15 includes a communication interface and a processor communicatively coupled to the communication interface. The processor determines channel prediction terms from both first channel estimation terms derived from first common pilot channel signal and second channel estimation terms derived from second common pilot signal to enable control over future transmission patterns of the channel using the channel prediction terms. As set forth above in the context of claim 1, the Examiner fails to show that in the Komatsu reference use of common pilot channel signals is either suggested or disclosed. Absent such teachings or showing, for at least this reason alone, withdrawal of the § 103 rejection of claim 15 and the claims depending therefrom is respectfully requested.

Withdrawal of the § 103 rejections of claims 6, 10-13, 15 and 22-26 is respectfully requested since the Komatsu reference in view of Komatsu (WO 00/72464), either considered alone or in combination with the Komatsu reference (U.S. Patent Publication 2001/0046873) fails

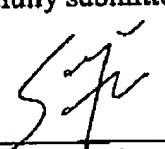
Application No. 09/908,963
Amendment dated September 30, 2003
Reply to Office Action of September 10, 2003

to render obvious claims 6, 10-13, 15 and 22-26 based on the reasons presented above in the context of claim 1. Thus no *prima facie* case of obviousness is made out. Therefore, the Examiner is requested to specifically show where the cited references either teach or suggest the claim limitations of claim 15. Otherwise, withdrawal of the § 103(a) rejection of independent claim 15 is respectfully requested. Dependent claims from independent claim 15 and that from the independent claim 22 are patentable for at least the reason that these claims depend from a corresponding allowable claim. The Examiner is respectfully requested to consider all the pending claims.

In view of these remarks, the application is now in condition for allowance and the Examiner's prompt action in accordance therewith is respectfully requested.

Respectfully submitted,

Date: September 30, 2003


Sanjeev K. Singh under 37 C.F.R. § 10.9(b)
Registration No. 28,994
TROP, PRUNER & HU, P.C.
8554 Katy Freeway, Suite 100
Houston, Texas 77024
(713) 468-8880 [Phone]
(713) 468-8883 [Fax]

Customer No.: 21906

RECEIVED
CENTRAL FAX CENTER
OCT 01 2003

OFFICIAL